### REMARKS

Applicants thank the Examiner and Supervisory Examiner for taking time to meet with Applicants' representative in a telephonic interview on April 7, 2011. During the interview, the rejections contained in the Office Action mailed on December 16, 2010 were discussed. The substance of the interview is incorporated in this response.

In the Office Action<sup>1</sup>, the Examiner: (1) rejected claims 1, 4, 7, 9-11, 13, 16, 19, 21-23, and 25-41 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement; (2) rejected claims 1, 4, 7, 13, 16, 19, 25-29, 33-36, and 40-41 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent Publication 2003/0130883 to Schroeder et al. ("Schroeder") in view of an Examiner's Official Notice; and (3) rejected claims 9-11, 21-23, 30-32, and 37-39 under 35 U.S.C. § 103(a) as unpatentable over Schroeder, in view of the Examiner's Official Notice, and further in view of U.S. Patent Publication 2002/0143604 A1 to Cox et al. ("Cox").

By this amendment, Applicants have amended claims 1, 7, 13, 19, 25-26, 33, and 40-41. Upon entry of this Amendment, claims 1, 4, 7, 9-11, 13, 16, 19, 21-23, and 25-41 remain pending and under examination, with claims 1, 13, 25-26, 33, and 40 being independent.

### Rejection of All Pending Claims under 35 U.S.C. § 112, First Paragraph

Applicants respectfully traverse the rejections of all pending claims, claims 1, 4, 7, 9-11, 13, 16, 19, 21-23, and 25-41, as unpatentable under 35 U.S.C. § 112, first

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<sup>&</sup>lt;sup>1</sup> The Final Office Action may contain statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Final Office Action.

paragraph, for allegedly failing to provide an adequate written description. The Examiner contends that the Applicants were not in possession of certain claim elements as presented in an earlier amendment, and as a result, the amendments did not have support in the application as filed.

In response to an earlier rejection presented by the Examiner under 35 U.S.C. § 101 in the Office's rejection mailed April 14, 2009, Applicants amended claims 1, 7, 13, and 19. See Applicants' Response of July 13, 2009. The Examiner issued a Final Office Action mailed November 24, 2009, which alleged that although the issues under § 101 were resolved, there was no support in the specification for the amendments and thus rejected the claims under 35 U.S.C. § 112, first paragraph. Applicants responded January 22, 2010 with arguments explaining where support could be found in the specification. In the present Office Action, the Examiner maintains that the amendments have no support in the specification and papers as originally filed. See Office Action at 2. Applicants respectfully disagree and traverse this rejection.

The Examiner relies on *Hyatt v. Boone*, 47 U.S.P.Q.2d 1128 (Fed. Cir. 1998), for the proposition that "the standard for determining whether the written disclosure amply supports the claims is that a person of ordinary skill in the art would have understood, at the time the application was filed, that the description <u>requires</u> that limitation." Office Action at 5 (emphasis in original). The Examiner misconstrues *Hyatt. Hyatt*'s "requirement" is that the "applicant was in possession of the claimed invention as of the date of the invention." See M.P.E.P. § 2106 V.B.1 (*citing Hyatt, Regents of the University of California v. Eli Lilly & Co.*, 119 F.3d 1559, 1566-67 (Fed. Cir. 1997)). Indeed, as applied in this case, *Hyatt* stands for the proposition as stated, that § 112,

first paragraph, is satisfied if a person of ordinary skill in the art would have understood, at the time the application was filed, that the applicant was <u>in possession</u> of "a computer processor," as in claims 1, 4, 7, 9-11, and 26-32; a "processor," "memory," "display device," "user interface," and "distinct software modules embodied on computer readable medium," as in claims 13, 16, 19, 21-23, and 33-39; and "computer readable medium," as in claims 25 and 40-41. See Office Action at p.8. Such possession is demonstrated in the application as filed.

Possession is demonstrated because running a software tool requires essential functional elements. These elements are inherent in the operation of a software tool. Software must be processed by a processor and a processor requires memory to store and process computing instructions. Therefore a processor and memory are inherent in running a software tool. This is supported by the definition of "software." For example, a technical dictionary contemporary to the as-filed application, the Modern Dictionary of Electronics, defines software as,

1. Programs, routines, codes, and other written information for use with digital computers, as distinguished from the equipment itself, which is referred to as hardware. 2. A set of computer programs, procedures, rules, and associated documentation concerned with the operation of a dataprocessing system, e.g., compilers, monitors, editors, utility programs. 3. A computer program or set of programs held in some storage medium and loaded into read/write memory (RAM) for execution. 4. The set or package of programs that instructs a computer to perform certain predefined functions. 5. The user program that controls the operation of a programmable controller. 6. Totality of programs and routines used to extend the capabilities of computers, such as compilers, assemblers, narrators, routines, and subroutines. 7. The computer programs, procedures, and documentation concerned with the operation of a computer system, e.g., assemblers, compilers, operating systems, diagnostic routines, program loaders, manuals, library routines, and circuit diagrams. Software is the name given to the programs that cause a computer to carry out particular operations. Contrasted with hardware. 8. The modifiable (to some extent) binary bit patterns in the memory of a

computer that control the operation of the processing portion of the computer. Software programs are usually written in one of three general classes of language: machine, assembler, or higher level. 9. A computer's programs. If a particular bit of data manipulation is done through a program rather than by special circuitry, it is said to be "in software." Doing things in software is cheap and flexible, since a program can be easily changed. 10. An expression for programs and also tapes or disks with recorded data. There are various kinds of software, including applications and executive. The executive is the "heart" of the system and is responsible for scheduling and controlling activity in the system. Applications or task programs perform specific functions whose activity is controlled by the executive. 11. Programs that control the operation of computer hardware. Operating systems, executives, monitors, compilers, editors, utility routines, and user programs are considered software.

R. Graf, Modern Dictionary of Electronics, "software" (7th ed. 1999) (emphasis added). It is apparent from this definition that the term "software" inherently discloses computer hardware, including a processor and memory, which are necessary to run "software," and are therefore inherent in the implementation of "software."

Further, the Application contains multiple references to using data to perform calculations and analysis. For example, Paragraphs [0013], [0016], and [0018]-[0019] use language such as "historical data," "shipment data," and "logged" data. Therefore, the storage of data and program instructions on computer-readable memory is inherent in the operation of the claimed software tool.

The Application further discloses that the software tool provides input functionality and display functionality, necessitating the use of a "user interface" and a "display device." For example, Figure 3 shows a display of a user interface, and Paragraphs [0022]-[0024] use language such as "input" and "input screen" Thus, a "user interface" and "display device" are inherent in the claimed software tool.

The Examiner admits that "a customized software tool could be implemented utilizing a communication bus, or a network server, or any number of other

known/obvious components. . . ." and that a "myriad of potential configurations . . . could be utilized to implement the [software] tool." Office Action at p.5. Applicants submit that amended claims directed to components that are inherent in a software tool satisfy the written description requirement.

Consider by analogy the USPTO Director's recent statement on new matter. In explaining why adding the recitation of "non-transitory" before "computer readable medium" is not new matter, even when the specification is silent, he states:

Such an amendment would typically not raise the issue of new matter, even when the specification is silent because the broadest reasonable interpretation relies on the ordinary and customary meaning that includes signals *per se*. The limited situations in which such an amendment could raise issues of new matter occur, for example, when the specification does not support a non-transitory embodiment because a signal *per se* is the only viable embodiment such that the amended claim is impermissibly broadened beyond the supporting disclosure. *See, e.g., Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473 (Fed. Cir. 1998).

"Subject Matter Eligibility of Computer Readable Media" (January 26, 2010) at 1.

Essentially, the Director acknowledges that the ordinary and customary meaning of signals includes both transitory and non-transitory signals, and that an amendment specifying "non-transitory computer readable memory" is not adding new matter because the amendment simply limits the configuration to a particular embodiment that happens to render the claim statutory.

The situation at hand is similar. The Examiner recognizes that a software tool can be implemented in a "myriad" of ways, using a variety of different components and techniques, but the claims as amended simply recite features that are inherent to the implementation of a software tool. Therefore, one of ordinary skill in the art would have recognized that the Applicants were in possession of at least these technical elements

to implement the software tool from the disclosure as-filed. See M.P.E.P. § 2106(V)(B)(1).

Moreover, Applicants have amended the claims to demonstrate a fewer number of steps as disclosed as executed on a processor. The recitation in Claim 1, "using econometric modeling to quantify, by a processor, the effect of the at least one marketing element on shipments based on historical marketing spend data and historical shipment data" (emphasis added) and the recitation in claim 1 "forecasting, by the processor, consumer demand and shipments in response to the at least one marketing plan and results of the econometric modeling" (emphasis added), are supported by at least paragraph [0005]'s disclosure of a "[software] tool . . . used to directly forecast shipments [using] [e]conometric modeling. . . . " The recitation in Claim 1, "executing, by the processor, a what-if scenario by . . . " (emphasis added), is supported by at least paragraph [0006]'s disclosure of a software tool that "enables the user to perform a what-if analysis. . . . " The recitation in Claim 1, "capturing, by the processor, actual consumer demand . . ." (emphasis added), is supported by at least paragraph [0007]'s disclosure of a software tool that "may also be used to capture and track actual consumer demand . . . . "

The other independent claims (claims 13, 25, 26, 33, and 40) contain similar recitations and are therefore also supported by the specification as filed. Thus, the claims meet the written description requirement of 35 U.S.C. § 112, first paragraph.

## Rejection of Claims 1, 4, 7, 13, 16, 19, 25-29, 33-36, and 40-41

Applicants respectfully traverse the rejection claims 1, 4, 7, 13, 16, 19, 25-29, 33-36, and 40-41 under 35 U.S.C. § 103(a) as unpatentable over *Schroeder* in view of the Examiner's Official Notice.

Applicants maintain their objection to the propriety of the Examiner's taking of Official Notice, and refer the Examiner to the remarks presented on pages 12-15 of Applicants' January 22, 2010 Response. In particular, Applicants submit that the Examiner's Official Notice has not been demonstrated as capable of "such instant and unquestionable demonstration as to defy dispute." M.P.E.P. § 2144.03 (A) (citing In re Ahlert, 424 F.2d 1088, 1091, 165 USPQ 418,420 (CCPA 1970)). The Examiner relies on U.S. Pub. No. 2003/0065601 A1 to Gatto ("Gatto") to show that it was allegedly "well known to those of ordinary skill in the art, at the time of the invention, to calculate and display percent errors between forecasted data and actual data when evaluating the predictive capacity of a particular model." Office Action at 11. The mere presence of "percent error" in Gatto, however, does not necessarily mean that the technique was "well-known." Indeed, if the applicants of *Gatto* felt the technique was well-known, then they would not have claimed a "means for pre-calculating predetermined analystperformance metrics [(e.g., percent error)] from the data," as in Gatto's published claim 1. Therefore Gatto is insufficient for showing that it was "well known to those of ordinary skill in the art, at the time of the invention, to calculate and display percent errors between forecasted data and actual data when evaluating the predictive capacity of a particular model."

The rejection is legally deficient because the Examiner has not properly resolved the Graham factual inquiries, the proper resolution of which is the requirement for establishing a framework for an objective obviousness analysis. See M.P.E.P. § 2141(II), citing to Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), as reiterated by the U.S. Supreme Court in KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 82 USPQ2d 1385 (2007). In particular, the Examiner has neither properly determined the scope and content of the prior art, nor properly ascertained the differences between the claimed invention and the prior art, at least because the Examiner has not interpreted the prior art and considered both the invention and the prior art <u>as a whole</u>. See M.P.E.P. § 2141(II)(B).

Whereas, *Schroeder* teaches "a method and system for predicting the <u>profit</u> attributable to a proposed sales promotion of a product," the instant claims recite "econometric modeling to quantify the effect of the change in planned spending on [a marketing element] on <u>consumer demand</u>, <u>retail-load adjustments</u>, <u>and shipments</u>." *Compare Schroeder*, Abstract (emphasis added) *with* Claim 1 (emphasis added). The teachings of *Schroeder* are of a different nature than that of the claimed features of the Application, which must be accounted for by the Examiner.

In addition, *Schroeder* does not teach all of the elements of the amended claims. For instance, *Schroeder* does not disclose at least "executing the modified marketing plan and capturing actual consumer demand, retail-load adjustments, and shipment data," nor "using econometric modeling to quantify the effect of the change in planned spending on consumer demand, retail-load adjustments, and shipments," as in amended claim 1 (emphasis added). Neither *Schroeder* nor the Examiner's Official

Notice mention "retail-load adjustments" at all, nor do they appear to disclose any reasonably identical element. *Cox* also does not cure the deficiencies of *Schroeder* and the Examiner's Official Notice. For at least this reason, claim 1, as amended, is allowable.

Further, *Schroeder* does not teach "using econometric modeling to quantify the effect of the at least one marketing element on shipments <u>based on historical marketing spend data and historical shipment data</u>," as in amended claim 1 (emphasis added). *Schroeder* teaches two planning modes of operation. *Schroeder* at [0073]. In one mode, shipment estimates are calculated "based on the forecasts of sales" along with supply chain demand, while in the other mode shipment estimates are entered by a user. *Id.* at [0073], claim 18. Therefore *Schroeder* does not teach "using econometric modeling to quantify the effect of the at least one marketing element on shipments <u>based on historical marketing spend data and historical shipment data</u>." The Examiner's Official Notice also does not teach this claim feature. Neither does *Cox* cure the deficiencies of *Schroeder* and the Examiner's Official Notice. For at least this additional reason, claim 1, as amended, is allowable.

Further still, *Schroeder* does not teach displaying "the forecasted retail-load adjustments, the actual retail-load adjustments, and a second percent error between the forecasted retail-load adjustments and the actual retail-load adjustments," as in amended claim 1. Again, neither *Schroeder* nor the Examiner's Official Notice discuss "retail-load adjustments" at all. *Cox* also does not cure the deficiencies of *Schroeder* and The Examiner's Official Notice. For at least this additional reason, claim 1, as amended, is allowable.

Recitations similar to those argued above have been added to the other independent claims and dependent claims, such that all of the pending claims, whether independent or due to their dependent nature, incorporate claim features consistent with one or more of the recitations as argued above with respect to claim 1. Specifically, independent claims 13, 25, 26, 33, and 40 have been amended to include features by recitations similar to one or more of the Applicants' arguments presented above with respect to claim 1. Therefore, Applicants submit that at least in light of these amendments and arguments, the independent claims are allowable. Due to their dependency on an allowable independent claim, dependent claims 4, 7, 16, 19, 27-29, 34-36, and 41 are also allowable. Accordingly, Applicants respectfully request withdrawal of the rejection of these claims and their timely allowance.

# Rejection of Claims 9-11, 21-23, 30-32, and 37-39 under 35 U.S.C. § 103(a)

Applicants respectfully traverse the rejection of claims 9-11, 21-23, 30-32, and 37-39 under 35 U.S.C. § 103(a) as unpatentable over *Schroeder*, in view of the Examiner's Official Notice, and further in view of *Cox*.

For the same reasons set forth above, these claims are allowable. In particular, a reasonable combination of *Schroeder*, the Examiner's Official Notice, and *Cox* fail to teach all of the claimed features as amended. Because Amendments incorporating corresponding elements similar to those argued above with respect to claim 1 into the other independent claims, claims 9-11, 21-23, 30-32, and 37-39 are allowable due to their dependent nature. Accordingly, Applicants respectfully request withdrawal of the rejection of these claims and their timely allowance.

## The Examiner Failed To Fully Consider Newly Added Claims

The Examiner, in this non-final office action, alleges that "the only limitation differentiating claims 25 and 40-41 over the prior art applied . . . is that the claims are directed to a computer readable medium," and that "the remaining limitations of claims 25-41 substantially repeat the limitations recited earlier . . . ." Office Action at 14. The Examiner has failed to address features of the newly added claims 25-41 not found in the earlier claims.

In particular, independent claim 26 and related dependent claims 27-32 are directed to a "computer-implemented method for using econometric techniques to quantify marketing drivers and forecast consumer demand and shipments." Among other elements, claim 26 recites, "providing, by the marketing plan providing module, at least one marketing plan, wherein the at least one marketing plan comprises at least two marketing elements [and] using econometric modeling, by the historical data analyzing module, to quantify the relative effect of the at least two marketing elements on shipments" (emphasis added). Applicants respectfully submit that none of the cited references, nor the Examiner's Official Notice taken by the Examiner, teaches or suggests "the at least one marketing plan compris[ing] at least two marketing elements" and "using econometric modeling . . . to quantify the relative effect of the at least two marketing elements on shipments on shipments" recited in claim 26 (emphasis added).

Schroeder discloses a "method and system for predicting the profit attributable to a proposed sales promotion of a product." Schroeder, Abstract (emphasis added). In contrast, Applicant's claim 26 feature includes "at least two marketing elements."

Because Schroeder is limited to only a sales promotion, it does not teach or suggest

"the at least one marketing plan compris[ing] at least two marketing elements" and "using econometric modeling . . . to quantify the relative effect of the at least two marketing elements on shipments" as recited in claim 26. Independent claims 33 and 40 are of different scope but contain similar recitations as claim 26, and should also be fully considered accordingly.

## Conclusion

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to Deposit Account No. 06-0916.

Respectfully submitted,

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